Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (original): A method for characterizing a quality of a network path, including a first segment and a second segment, the method comprising:

accessing a first metric and a second metric,

wherein the first metric and the second metric are at least in part quality characterizations of a same plurality of one or more network applications,

the quality characterization characterizes a quality of the same plurality of one or more network applications running at one or more segment end-points,

the first metric and the second metric are at least partly a function of a same plurality of one or more elementary network parameters,

the plurality of one or more network parameters include one or more of delay, jitter, loss, currently available bandwidth, and intrinsic bandwidth,

the first metric is at least partly the function of the same plurality of elementary network parameters of the first segment,

the one or more segment end points include one or more endpoints of the first segment,

the second metric is at least partly the function of the same plurality of elementary network parameters of the second segment, and

the one or more segment end points include one or more endpoints of the second segment; and

adding the first metric and the second metric to generate a third metric,

wherein the third metric is at least partly the function of the same plurality of one or more elementary network parameters of the network path,

the one or more segment end points include one or more endpoints of the network path, and

the third metric is a quality characterization of the same plurality of one or more applications.

Claim 2 (currently amended): The method of claim 1, further comprising:

prior to accessing the first or the second metric, generating at least one of the first metric and the second metric.

Claim 3 (currently amended): The method of claim 1, further comprising:

prior to accessing the first or the second metric, receiving at least one of the first metric and the second metric.

Claim 4 (original): The method of claim 1, wherein at least one of the plurality of one or more network parameters is dynamic.

Claim 5 (original): The method of claim 1, wherein at least one of the plurality of one or more network parameters is static.

Claim 6 (original): The method of claim 1, wherein the plurality of one or more network applications include at least one of UDP and TCP applications.

Claim 7 (original): The method of claim 6, wherein the plurality of one or more network applications include UDP applications.

Claim 8 (original): The method of claim 7, wherein the plurality of one or more network applications include voice.

Claim 9 (original): The method of claim 7, wherein the plurality of one or more network applications include video.

Claim 10 (original): The method of claim 9, wherein the plurality of one or more network applications include video conferencing.

Claim 11 (original): The method of claim 6, wherein the plurality of one or more network applications include TCP applications.

Claim 12 (original): The method of claim 11, wherein the plurality of one or more network applications include HTTP.

Claim 13 (original): The method of claim 12, wherein the plurality of one or more network applications include HTTP/1 .0.

Claim 14 (original): The method of claim 12, wherein the plurality of one or more network applications include HTTP/1 .1.

Claim 15 (original): The method of claim 11, wherein the plurality of one or more network applications include ftp.

Claim 16 (original): The method of claim 11, wherein the plurality of one or more network applications include telnet.

Claim 17 (original): The method of claim 1, wherein the plurality of one or more network parameters include delay.

Claim 18 (original): The method of claim 1, wherein the plurality of one or more network parameters include jitter.

Claim 19 (original): The method of claim 1, wherein the plurality of one or more network parameters include loss.

Claim 20 (original): The method of claim 1, wherein the plurality of one or more network parameters include currently available bandwidth.

Claim 21 (original): The method of claim 1, wherein the plurality of one or more network parameters include intrinsic bandwidth.

Claim 22 (currently amended): The method of claim 1, wherein the ~~metric includes~~ first, second, and third metrics include non-performance related characteristics.

Claim 23 (currently amended): The method of claim [[21]] 22 , wherein the non-performance related characteristics includes pre-specified route preferences.

Claim 24 (original): A network system, comprising:

a plurality of one or more network devices configured, such that if the network device is coupled to at least a network path including a first segment and a second segment, the plurality of one or more network devices performing:

accessing a first metric and a second metric,

wherein the first metric and the second metric are at least in part quality characterizations of a same plurality of one or more network applications,

the quality characterization characterizes a quality of the same plurality of one or more network applications running at one or more segment end-points,

the first metric and the second metric are at least partly a function of a same plurality of one or more elementary network parameters,

the plurality of one or more network parameters include one or more of delay, jitter, loss, currently available bandwidth, and intrinsic bandwidth,

the first metric is at least partly the function of the same plurality of elementary network parameters of the first segment,

the one or more segment end points include one or more endpoints of the first segment,

the second metric is at least partly the function of the same plurality of elementary network parameters of the second segment, and

the one or more segment end points include one or more endpoints of the second segment; and

adding the first metric and the second metric to generate a third metric,

wherein the third metric is at least partly the function of the same plurality of one or more elementary network parameters of the network path,

the one or more segment end points include one or more endpoints of the network path, and

the third metric is a quality characterization of the same plurality of one or more applications.

Claim 25 (currently amended): The network system of <u>claim</u> 24, wherein the network device further performs:
prior to accessing the first or the second metric, generating at least one of the first metric and the second metric.

Claim 26 (currently amended): The network system of <u>claim</u> 24, wherein the network device further performs:
prior to accessing the first or the second metric, receiving at least one of the first metric and the second metric.

Claim 27 (currently amended): The network system of <u>claim</u> 24, wherein at least one of the plurality of one or more network parameters is dynamic.

Claim 28 (currently amended): The network system of <u>claim</u> 24, wherein at least one of the plurality of one or more network parameters is static.

Claim 29 (currently amended): The network system of <u>claim</u> 24, wherein the plurality of one or more network applications include at least one of UDP and TCP applications.

Claim 30 (currently amended): The network system of <u>claim</u> 29, wherein the plurality of one or more network applications include UDP applications.

Claim 31 (currently amended): The network system of <u>claim</u> 30, wherein the plurality of one or more network applications include voice.

Claim 32 (currently amended): The network system of claim 30, wherein the plurality of one or more network applications include video.

Claim 33 (currently amended): The network system of claim 32, wherein the plurality of one or more network applications include video conferencing.

Claim 34 (currently amended): The network system of claim 29, wherein the plurality of one or more network applications include TCP applications.

Claim 35 (currently amended): The network system of claim 34, wherein the plurality of one or more network applications include HTTP.

Claim 36 (currently amended): The network system of claim 35, wherein the plurality of one or more network applications include HTTP/1.0.

Claim 37 (currently amended): The network system of claim 35, wherein the plurality of one or more network applications include HTTP/1.1.

Claim 38 (currently amended): The network system of claim 34, wherein the plurality of one or more network applications include ftp.

Claim 39 (currently amended): The network system of claim 34, wherein the plurality of one or more network applications include telnet.

Claim 40 (currently amended): The network system of claim 24, wherein the plurality of one or more network parameters include delay.

Claim 41 (currently amended): The network system of claim 24, wherein the plurality of one or more network parameters include jitter.

Claim 42 (currently amended): The network system of claim 24, wherein the plurality of one or more network parameters include loss.

Claim 43 (currently amended): The network system of <u>claim</u> 24, wherein the plurality of one or more network parameters include currently available bandwidth.

Claim 44 (currently amended): The network system of <u>claim</u> 24, wherein the plurality of one or more network parameters include intrinsic bandwidth.

Claim 45 (currently amended): The network system of <u>claim</u> 24, wherein the ~~metric includes~~ <u>first, second, and third metrics include</u> non-performance related characteristics.

Claim 46 (original): The network system of claim 45, wherein the non-performance related characteristics includes pre-specified route preferences.

Claim 47 (currently amended): The network system of <u>claim</u> 24, further comprising:

a plurality of one or more inputs adapted to be coupled to the network path; and

a plurality of one or more outputs coupled to the plurality of one or more inputs,

wherein responsive to a plurality of one or more packets arriving to the network device through the plurality of one or more inputs, the network device selects at least one output from the plurality of one or more outputs, and

the at least one output is determined at least partly using at least one of the first metric, second metric, and third metric.